Tablet Computers - Great for Accessing the Internet

By Phil Sorrentino, Past President, Sarasota PCUG, Florida
April 2012 issue, Sarasota Monitor
www.spcug.org
pcugedit@verizon.net

Tablets are all the rage. You might think it started with the iPad, but the iPad is just the latest and greatest implementation of what started out as pen computing with a stylus on a Personal Digital Assistant, circa 1992. (I bet many of you had a Palm Pilot, or something similar. I know I did.) Microsoft even introduced a tablet or slate computer using a pen (rather than a keyboard) around 2002. (The term Tablet PC was coined by Microsoft, as a pen-enabled computer conforming to Microsoft's hardware specifications, and running a licensed copy of the "Windows XP Tablet PC Edition" OS. Things have really changed from then.) The Apple iPod-Touch, in 2008, was the forerunner of the eventual iPad in 2010. Since the iPad introduction, many similar featured tablets have shown up for sale in stores and on-line retailers. Tablets, in use, are even showing up on popular TV shows. I bet you've seen them used on shows where technology plays an important part of the plot, like NCIS and NCIS Los Angeles.

Tablets are basically computers, but they are built for mobility, even more-so than laptops. They are light (under 1 ½ lbs.) and there are no moving parts, so they should be fairly rugged. (There are no hard drives or optical (CD/DVD) drives.) The Operating System and Applications (Apps) are stored in semi-conductor memory so they are readily available; the boot-up time is really quick. All tablets have a touch sensitive screen which acts as both the keyboard and mouse. All interactions are done by finger movements on the screen, called gestures. Most gestures are done by one finger, like a "flick" which moves an object in the direction you flick your finger, but some gestures require two fingers such as zoom, which is a outward pinching-like movement of the thumb and pointer fingers. Most popular tablets are either 7 or 10 inches (diagonally measured), although I've seen some smaller and some other sizes. Most Tablets do not have cell phone capabilities, but I have seen some smaller ones that included phone features.

Besides the hardware manufacturer, one of the main distinguishing features of a tablet is the Operating System (OS). Currently, there are three major OSs, Apple's iOS, Google's Android, and Microsoft's Windows Phone7. Apple has a line of tablets that use iOS, the iPad and iPad2. Many tablet hardware manufacturers, such as Motorola, LG, Lenovo, HTC, Samsung, Toshiba, ASUS, etc. make use of Android OS. And Microsoft has stated that many manufacturers will use Phone7, among them Samsung and Nokia. The User Interfaces (UI) that ride on top of the OSs are fairly similar in functionality, but have some very different features. Apple iPads are tightly tied to Apple iTunes. (What would you expect?) Google tablets are loosely tied to Google's applications such as Gmail

and Google+. I haven't seen much of Phone7, but I would guess it will be tied to Microsoft products and websites. Because the current tablet universe seems to be populated by Apple iPad products and those running Google's OS, I will leave Phone7 out of some of the comparisons. As of this writing Apple has about 60% of the market, and Android has around 30% (the Amazon Kindle Fire uses Android). One of the major software differences is that Android runs the Adobe Flash software that is used on many websites to support videos. Apple does not allow Adobe Flash to run. Another hardware difference seems to be that Google supports more interfaces to get data onto, and off, the tablet. Some Android tablets provide micro-SD slots for added storage, micro-HDMI output connectors, USB ports for file transfers, as well as the ability to replace batteries.

The tablet is a great computing device for using (or consuming) data. You probably would not want to create any large amount of data with a tablet (maybe only if you have a unit with a docking or wireless keyboard). Because of its light weight, the tablet is very convenient to use for accessing the internet when you're not at a desk or table. It fits right into your lap or can be easily held with one hand while the other hand controls its operations. It is great for checking your email, surfing the internet, reading a newspaper or magazine, reading a book, watching a video or movie, reviewing your collection of home photos, playing a game (have you tried Angry Birds?), all while listening to music from your own personal playlist.

So if you think you might like a Tablet, what should you look for? The first decision is really, What OS? If you like the Apple environment, then go with an iPad or iPad2, and you're done. There are very few decisions to make, except for how much memory; 16GB, 32GB or 64GB. If you prefer the more open environment of the Android OS, then there are a few more decisions to be made. The first one is size, 7" or 10". Some manufacturers have models in both sizes, and some make only one size. The seven inch size is good if you expect to carry it around and use it in many places; it probably fits into a handbag, but probably not a pocket. The ten inch size is easier on the eyes and typically will display more of a webpage. This larger size is nice for viewing, but is not as portable.

The next thing to consider is battery life. The current range seems to be roughly between 7 and 10 hours. Some models make it easy to replace the battery, some do not. (With the iPads, you are instructed to return the unit to the manufacturer.) Internal memory and an external memory slot are another area to consider. Internal memory is typically 8GB, 16GB, 32GB and possibly 64GB. External memory may be provided by an SD slot or a mini or micro-SD slot. The external memory is dependent on the size of the chip you put into the slot, currently up to 32GB. With external memory, you can use many memory chips, one at a time, which allows you to keep different things on different memory chips. (Another memory number you may see is RAM memory. This is typically 1GB (possibly as much as 2 GB) and is similar to the RAM in a PC. More RAM usually means increased speed and better multi-tasking.)

All models provide Wi-Fi connectivity to the internet. Some also provide 3G or 4G connectivity, via the cell phone network. Cell phone network connectivity will probably require a data plan which can cost from $30 to $60 a month depending on your data needs. If you only connect via Wi-Fi, there is no additional expense. Most models provide a USB port for connection with a PC. When connected to a PC, data files such as pictures, videos, and documents can be transferred between the devices. Many models also include a micro-HDMI interface for connecting to a digital TV. When connected to a TV, videos can be played on the tablet and viewed on the large screen digital TV. Bluetooth connectivity is also typically included.

Most of the popular models have processors that are quite adequate. Some of these are made by nVidia, Qualcomm, Arm, Texas Instruments, Samsung, and of course, Apple. (Where are Intel and AMD, you might ask. Low power consumption is the main requirement for tablet processors, and Intel and AMD have not been players in this arena in the past, but I think you will see some new processors from them show up in tablets in the near future.)

Tablets are now all the rage. Once you have one the real job begins; that of trying to decide what you are going to do with it. The thing that makes the tablet so useful is, like the PC, the fact that you can put Applications (Apps) on it. Many, which are becoming standard, Apps usually come with the tablet. Other Apps are easily downloaded from either iTunes or the Android Market. But the whole discussion of Apps will have to be the subject of a future article. Stay connected.